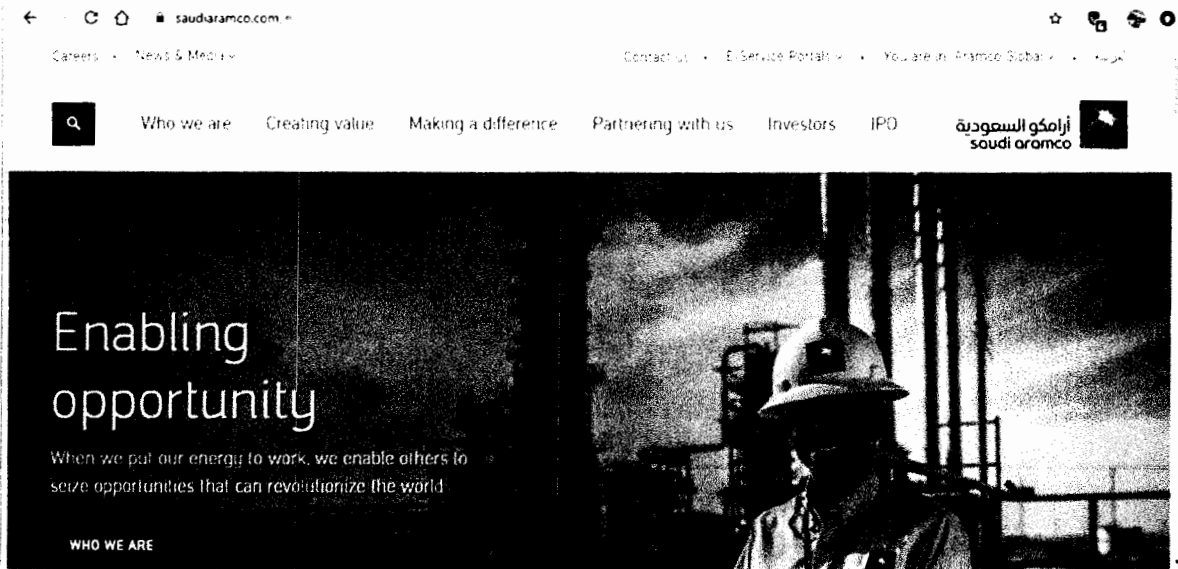



**Saudi Aramco Claim Chart for Infringement on US Patent 8,438,487 Screenshots taken from [www.SaudiAramco.com/en](http://www.SaudiAramco.com/en) from 12/2/2019 to 12/10/2019**

**Title:** Method and system for one-click navigation and browsing of electronic media and their category structure as well as tracking the navigation and browsing thereof

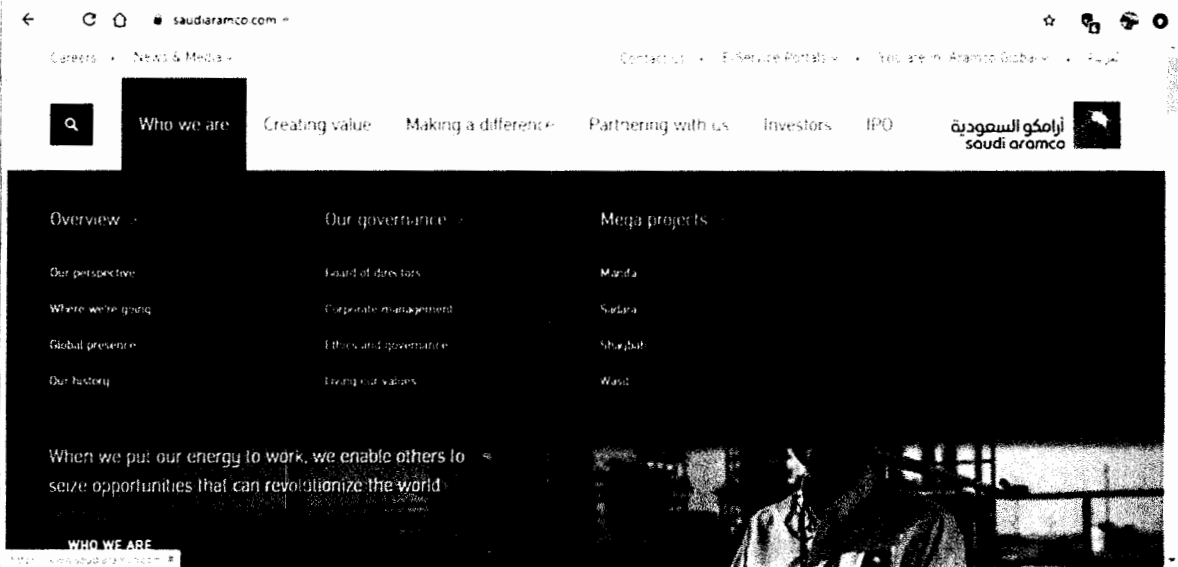
**Claim 1:** A system for navigating and browsing electronic media, comprising: a device enabling viewing of digitally stored information, the device being configured to display at least portions of a categorization structure for substantially all of a website having a plurality of nested cascading category levels, each category level of the plurality of nested cascading category levels comprising a plurality of

Saudi Aramco homepage captured on 12/02/2019: <https://www.SaudiAramco.com/>.



In the top-band above the image, a search icon “” and six top-level “category titles” of the site are displayed from left to the right, ending with “Saudi Aramco” and its logo at the right-end. The six top level category titles are: Who we are, Creating value, Making a difference, Partnering with us, Investors, and IPO.

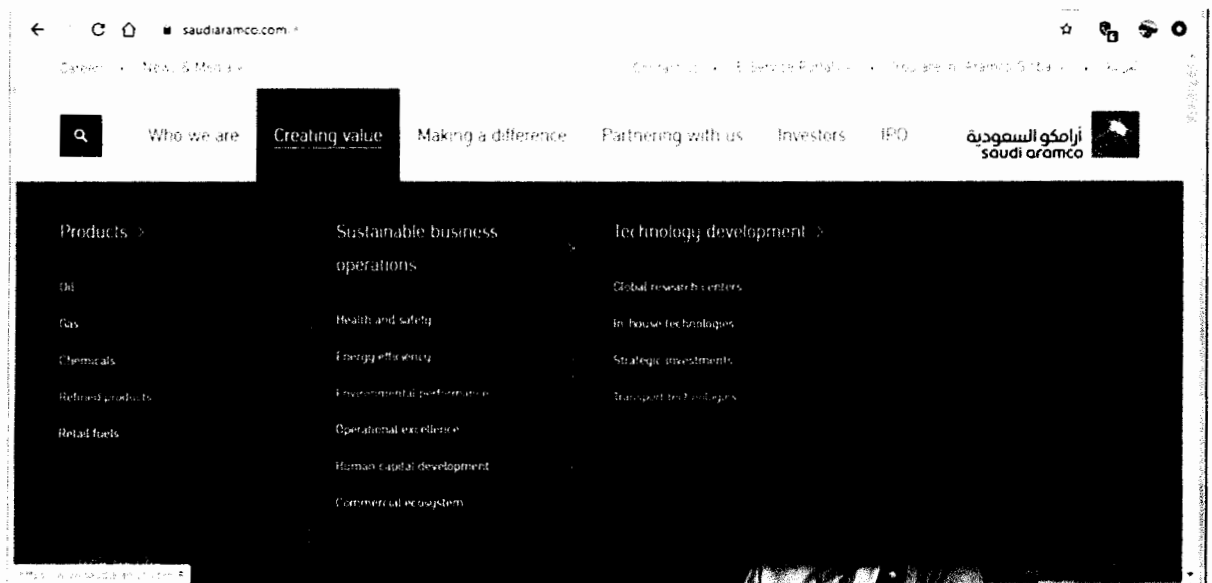
Click “**Who we are**”, a dropdown menu of the nested/cascading subcategory titles appears:



category titles of electronic media content stored on at least one storage device, each category title having a selectable link-token to the stored content for said each category title, said each category title also being coupled to a nested subcategory structure of said each category title, the nested subcategory structure of said each category title comprising link-tokens of category titles wherein said each category title and the category titles in the different plurality of category levels are able to be browsed independently of having to select and

The 1<sup>st</sup> level subcategory titles are: "Overview", "Our governance", and "Mega projects". The next level – 2<sup>nd</sup> level subcategory titles nested under these three 1<sup>st</sup> level subcategory titles are cascading underneath each of the three 1<sup>st</sup> level subcategory titles. These structured categorical titles are embedded with active links and hidden beneath the top-level category titles displayed in the top-band as described above, present and common to all pages on the site as taught in Patent 8,438,487. The dropdown menu is only visible for site-user review when called upon by clicking or placing cursor on a top level category title.

Now click on the top-level category title "Creating value," the dropdown menu for "Who we are" disappears, and the menu for "Creating value" appears for user review and selection.



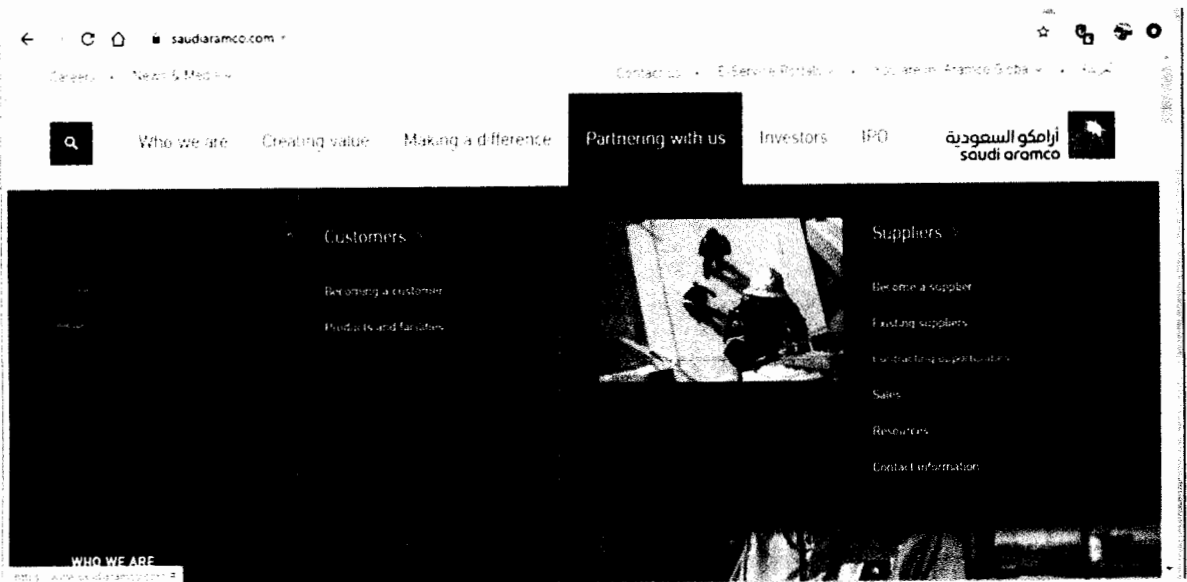
Now click the 3<sup>rd</sup> top level category title "Making a difference", the previously displaying menu for "Creating value" disappears, and the dropdown menu for "Making a difference" appears:



retrieve the stored content for any title from the at least one storage device, wherein the categorization structure enables a user viewing content of any category title in the categorization structure to retrieve content of any other category title in the categorization structure using a single retrieval command.

**Claim 22.** A system for tracking the navigation and browsing of electronic media, and facilitating the changing of navigation and browsing path, the system comprising a computer configured to

Now click the “**Partnering with us**” top level category title, the previously displaying menu for “Making a difference” disappears, and the new dropdown menu for “**Partnering with us**” appears.



Now click the next top-level category title “**Investors**,” a dropdown menu appears showing the next two levels of structured and nested subcategory titles: “**Investor overview**” and “**News and speeches**”. The 2<sup>nd</sup> level subcategories “**Reports & presentations**”, “**Investor Relations contacts**” are nested under the “**Investor overview**” 1<sup>st</sup> level subcategory of “**Investors**” category. The 2<sup>nd</sup> level subcategories “**Financial calendar**” and “**Subscribe to updates**” are nested under the 1<sup>st</sup> level subcategory “**News and speeches**” under the top level category “**Investors**”:

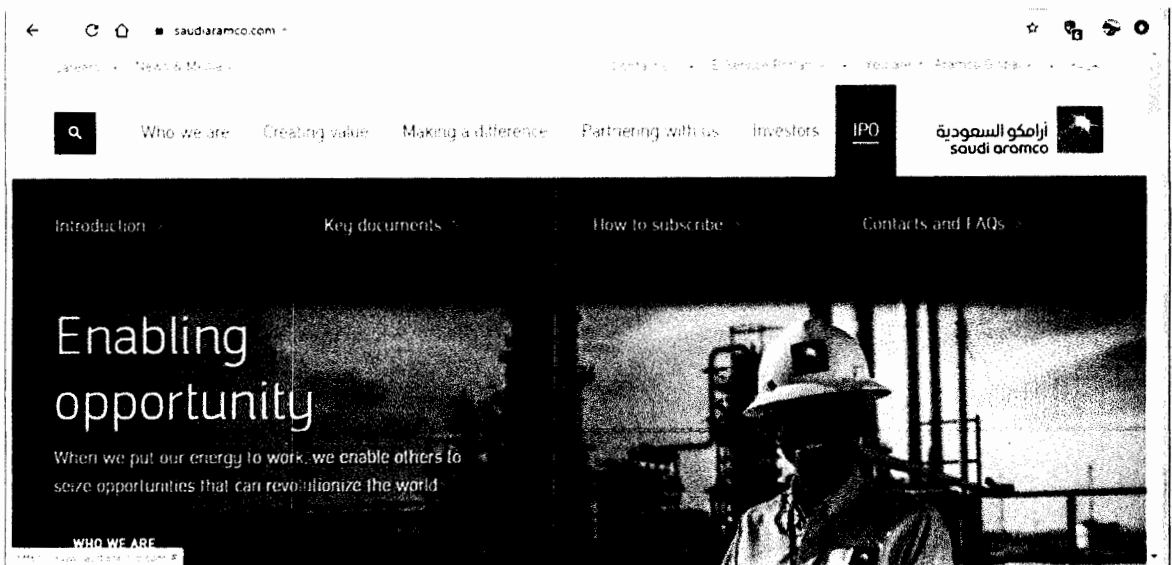




display to a user pages of content within an inter-linked content structure having a textual table format comprising at least three category levels, and to enable the user to retrieve with one single retrieval command any desired content page within the inter-linked content structure from a display of every other content page of the inter-linked content structure.

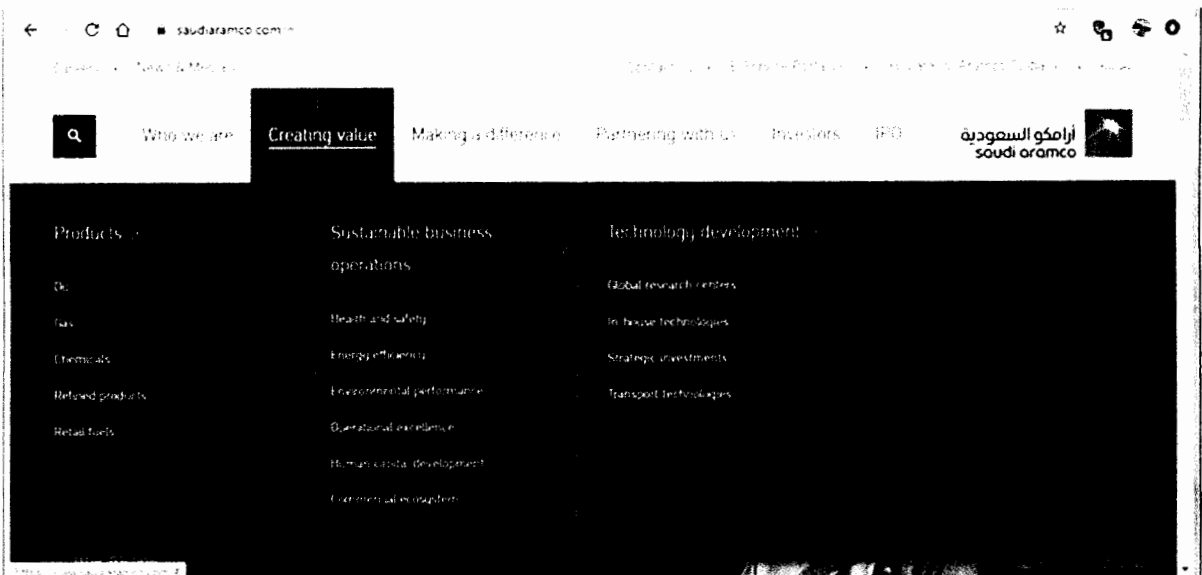
Claim 23. A system for navigating and browsing electronic media, comprising: a device for viewing of digitally

Now click the next top-level category title “IPO”, a dropdown menu appears underneath it:



Each and all category and subcategory titles are embedded with links, each link connecting to the page containing information related to the category title the link is associated with. Clicking any category or subcategory title organized and listed in the menus will bring forth the page linked with the clicked category/subcategory title.

As an example: clicking the “**in-house developed technology**” 2<sup>nd</sup> level subcategory title in the dropdown menu shown below under the “**Creating value**” top-level category, on the right-most column under the 1<sup>st</sup> level subcategory title “**Technology development**”:



Causes the page below to be brought forth to display on the display screen:

<https://www.saudiaramco.com/en/creating-value/technology-development/in-house-developed-technologies>

stored information, the device being configured to display at least portions of a categorization tree structure having a plurality of cascading category lists, each list of the plurality of cascading category lists comprising a plurality of category titles to electronic media content stored on at least one storage device, each category title having a selectable link-token to the stored content file for said each category title, wherein the device is configured to display one or more link-tokens in the stored content file for said each category title in response to

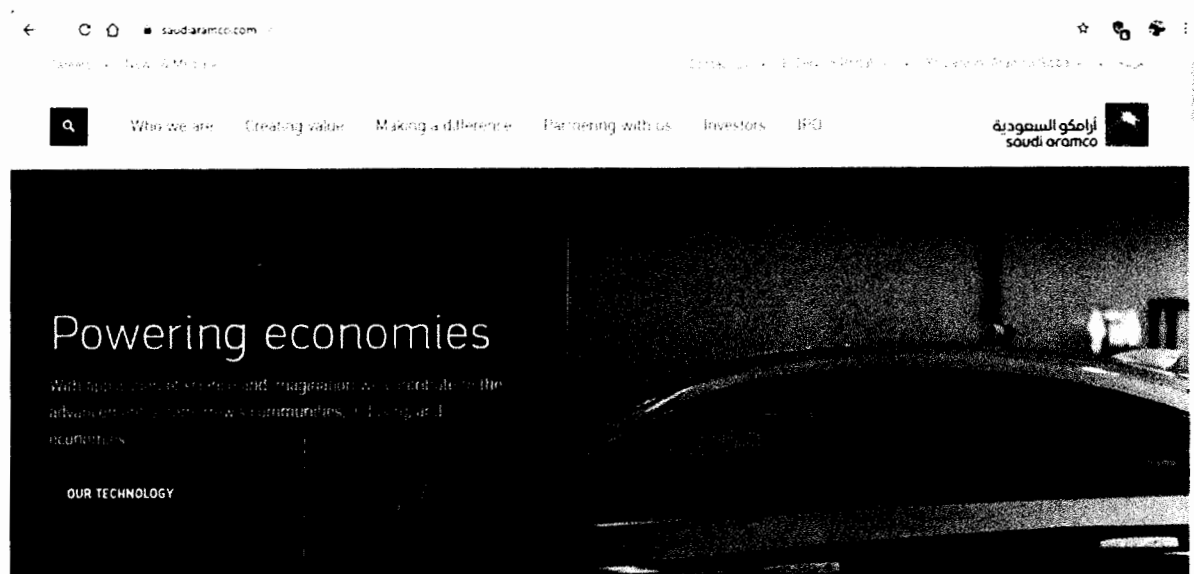


Note the “**Active One-Click Navigation Tracking String**” taught in Patent 8438487 is shown in the black-color band immediately underneath the top-band displaying the top-level informational categorical titles:

**Home / Creating value / Technology development / In-house technologies**

The right-most “sign post” in the string indicates the present page. The 2<sup>nd</sup> to the right most is the “sign post” for the prior-page “Technology development” one hierarchical level above/before the present page and is embedded with an active link, linking to the page. The next-up level to the left of it is a top-level category page “Creating value,” which can be reached by clicking its icon in the top band. The next-up is the Homepage, sign post “Home.” By clicking it, the site visitor can reach the homepage 3-levels up in the hierarchy within just one-click:

<https://www.saudiaramco.com/en>

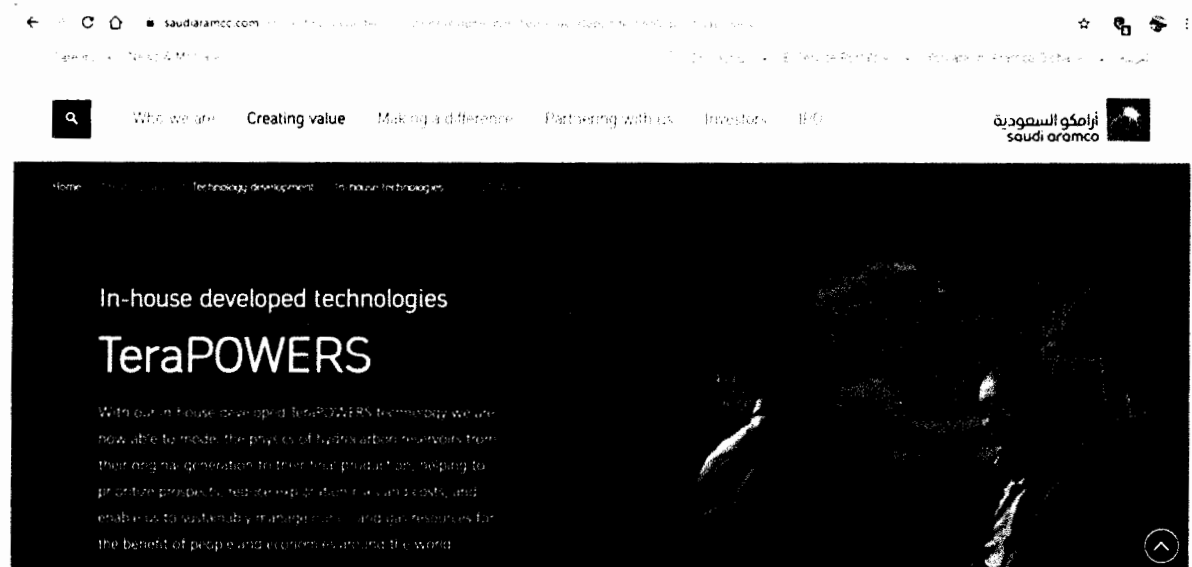


placement of a cursor on the selectable link-token of said category title without clicking on or invocation of the selectable link-token of said category title, whereby the system enables the category titles in the different plurality of category lists to be browsed independently of selecting and retrieving stored content files for any title from the at least one storage device, wherein the categorization tree structure enables a user viewing content of any category title in the categorization structure to retrieve content of any other category title in the categorization structure

The prior-art requires in this case of being on a present page three hierarchical level below the homepage, a viewer/site-visitor to click the “page back— “<” icon” on the upper left corner of the browser frame three times, each for one hierarchical level up from the present page and wait each time wait the corresponding pages to load before clicking the “<” icon again.

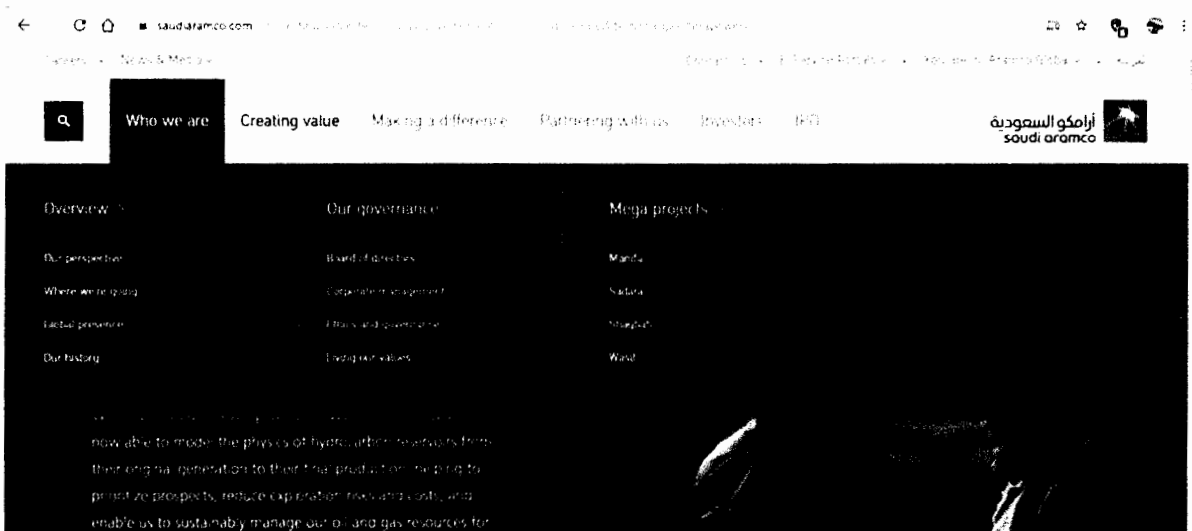
Return to the “in-house developed technologies” page, and click a link lower down in the page “Read More” at the end of the write-up about the last listed in-house developed technology “Tera Powers”. The page below is brought to display in the display screen.

<https://www.saudiaramco.com/en/creating-value/technology-development/in-house-developed-technologies/terapowers>



**Home / Creating value / Technology development / In-house technologies / TeraPOWERS**

The above “Active One-Click Navigation Tracking String” as instructed by Patent 8438487 is displaying in a black band immediately under the top-band. The structured and nested category and subcategory titles for the site are also active and available on this page and other pages.

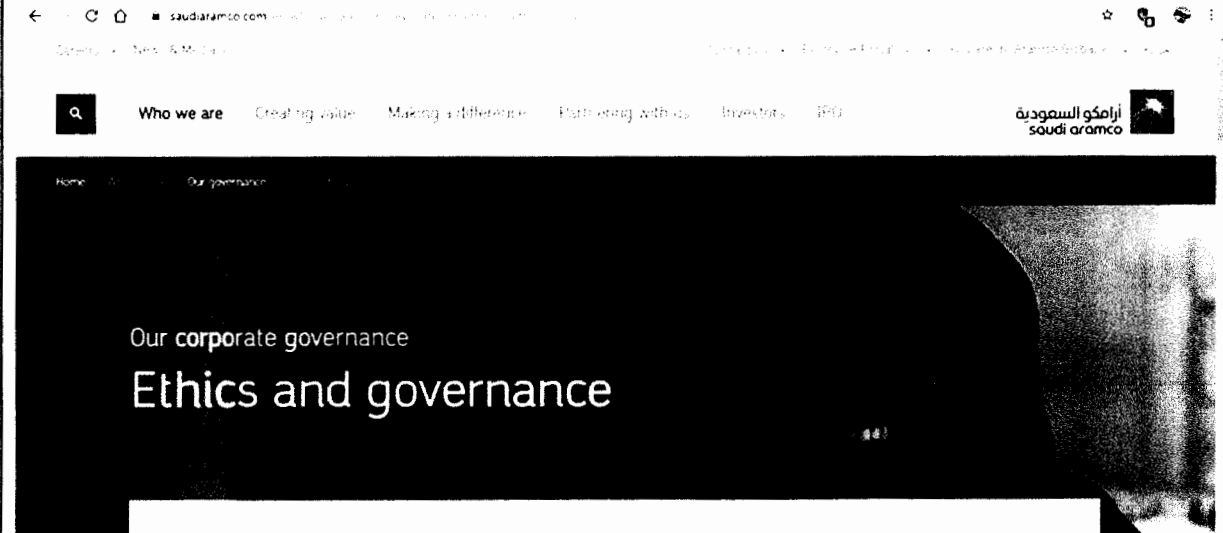




using a single retrieval command.

Claim 24. A system with one or more processors and memory that enables digitally stored information to be viewed on a display device, comprising: a website comprising a plurality of web pages; a hierarchical categorization structure including a plurality of levels of nested references for substantially all of the web pages in the website, a displayed categorization structure that is viewable in conjunction with the content of any web page in the categorization structure and that includes at least a

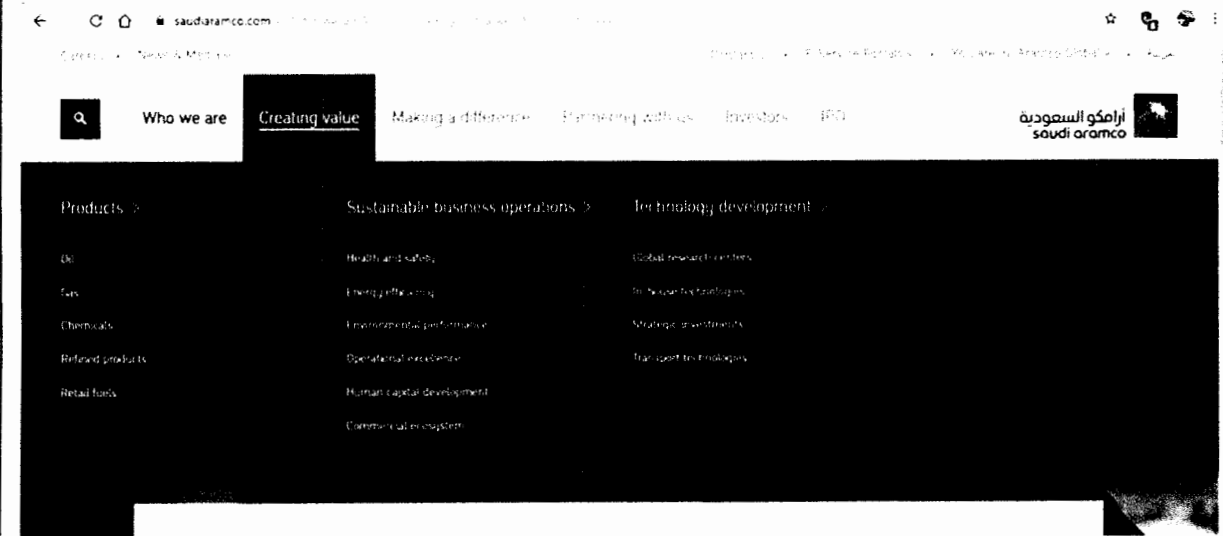
Click the “Ethics and governance” tab in the middle column of the above dropdown menu, the page is brought forth to display. The top portion/screen of the page is captured below:



**Home / Who we are / Our governance/ Ethics and governance**

The above “Active One-Click Navigation Tracking String” as instructed by 8438487 is displaying in a black band immediately under the top-band.

The embedded structured and nested category and subcategory titles for the entire site are active and available on this page as in other pages on the site.



Click the 2<sup>nd</sup> level subcategory “Oil” in the left-most column under the 1<sup>st</sup> level subcategory “Products”, the oil page is brought forth to the display window.

<https://www.saudiaramco.com/en/creating-value/products/oil>

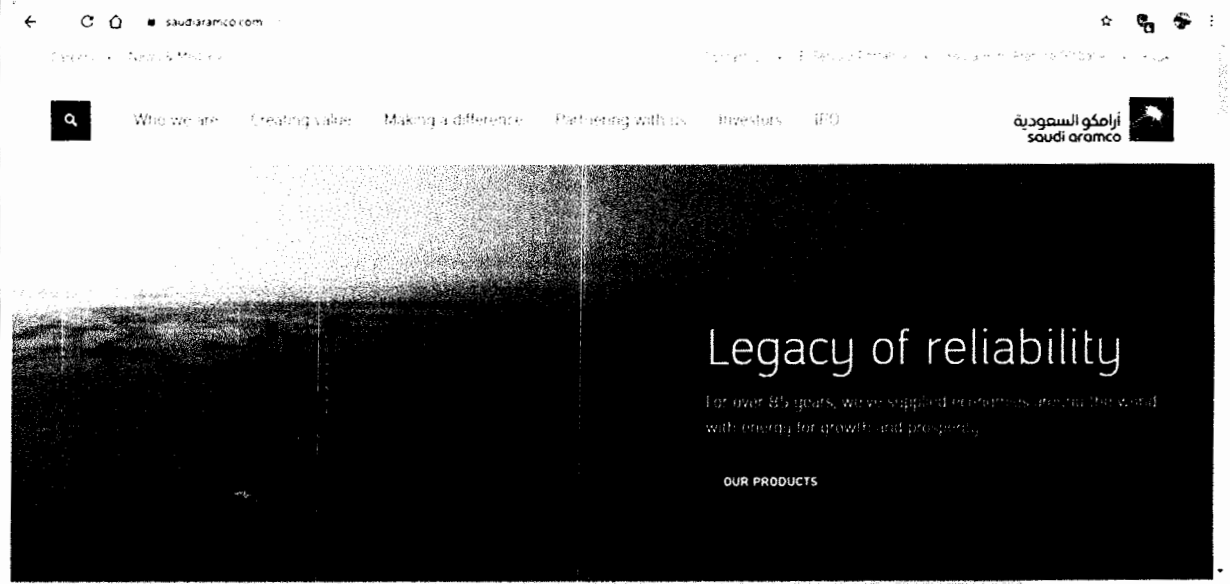
subset of the categorization structure references, such that a user is able to retrieve content of any other web page in the categorization structure by selecting using a single selection gesture a respective reference in the displayed categorization structure; and a gateway symbol displayed on at least some of the plurality of web pages for accessing the displayed categorization structure.



“Home / Creating value / **Products**/ Oil” is the Active Navigation Tracking String for this page, displaying above the image captured for the top screen/portion of the “Oil” page.

Click the “Home” link/sign-post, the page below is brought forth to display.

<https://www.saudiaramco.com/en>

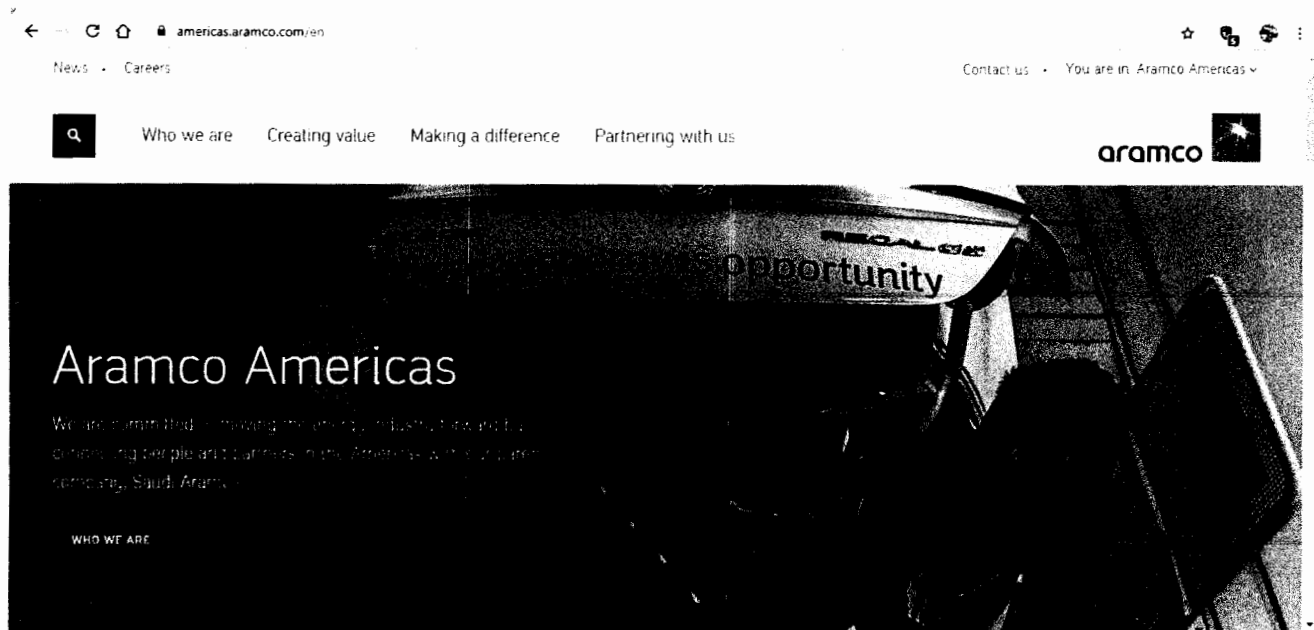


**Aramco Americas, Aramco Europe, Aramco China similarly infringe on this patent, which many sites of Saudi Aramco subsidiaries have likely also infringed on this patent. Below see the top portion of the homepages with the top level category titles appearing at the same place as they appear on the Saudi Aramco website—on all pages, and operating in the same fashion.**

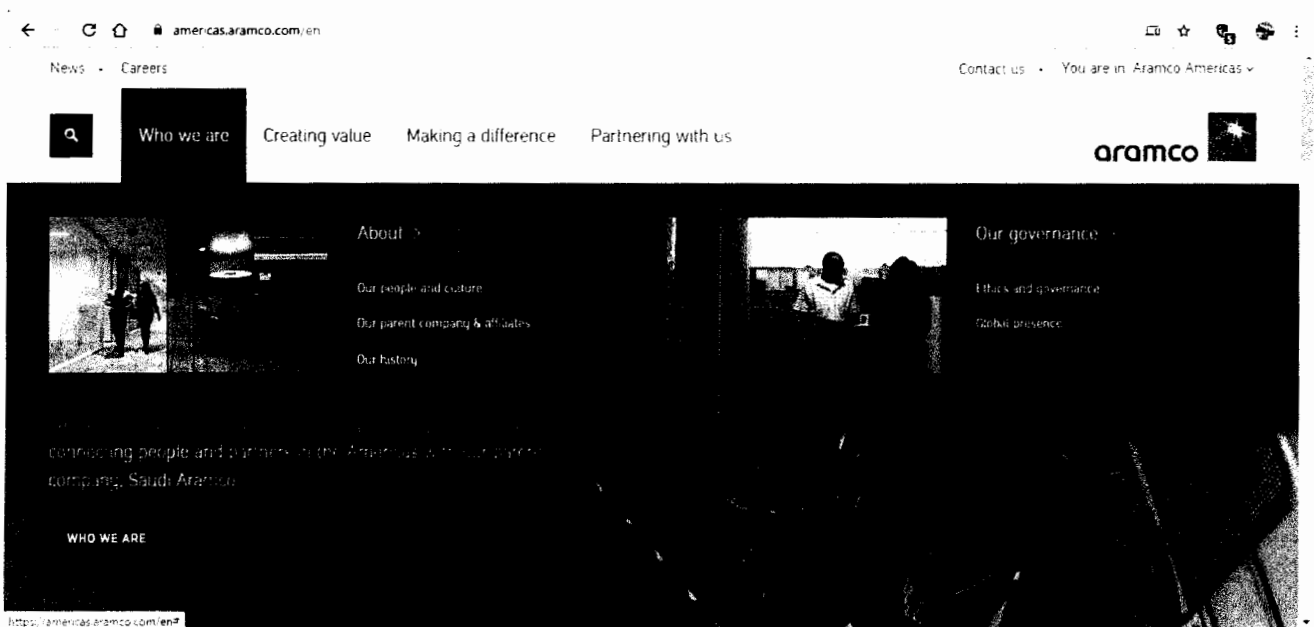


Aramco Americas:

<https://americas.aramco.com/en>



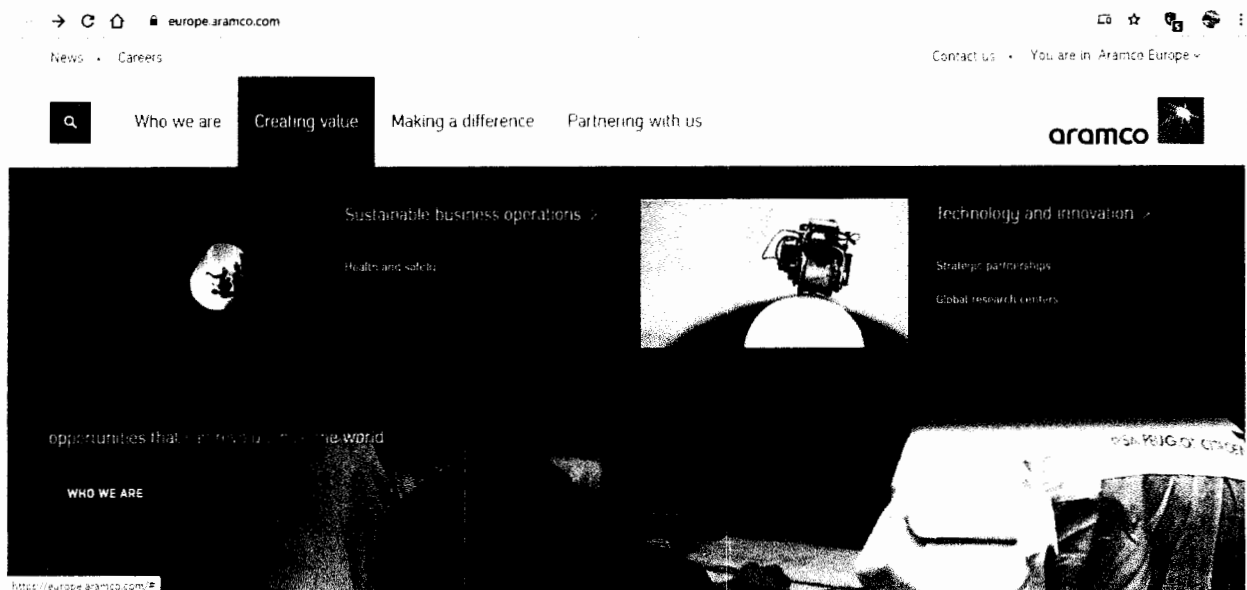
Dropdown subcategory menu for category “Who we are” is shown below, which was hidden in the homepage screen capture shown above, before a viewer/user click the “Who we are” category title to call forth its subcategory menu forth to display for preview.



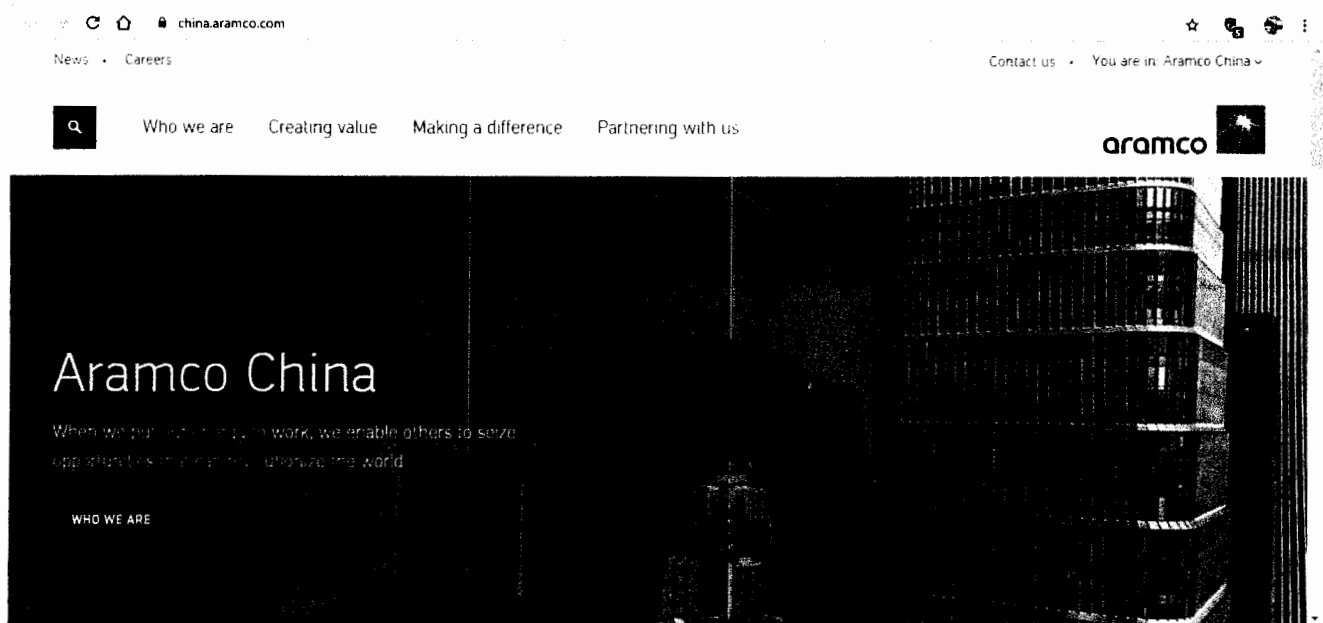
Aramco Europe:  
<https://europe.aramco.com/>



Dropdown subcategory menu for category “Creating value” is shown below, which was hidden in the homepage screen capture shown above before a viewer/user click the “Creating value” category title to call the hidden subcategory menu forth to display.



Aramco China:  
<https://china.aramco.com/>



Dropdown subcategory menu for top-level category “**Making a difference**” is shown below, which was hidden in the homepage screen capture shown above, before a viewer/user calls it forth by clicking “**Making a difference**.”



**8438487: Method and system for one-click navigation and browsing of electronic media and their category structure as well as tracking the navigation and browsing thereof**

**Abstract**

**Method and apparatus facilitate browsing of web pages or other electronic content stored over a network of remote and/or local storage devices. Browsing is performed without repeated**



**intermediary clicking and page downloads. Pre-browsing of the category structure is provided via rolling the cursor from category to category, and level to level, to view each category's sub-categories, without clicking on a category or downloading web-page(s) linked to the category. When the user selects the content linked to a particular category, the user invokes the link-token corresponding to the content to retrieve the content. A dynamic tracking-string with an embedded one-click nested/cascading category browsing apparatus facilitates returning and/or changing path during browsing and examination of electronic media, and allows the user to review more than one path along the category structure while the browser is at a page linked to any category at any level.**

1. A system for navigating and browsing electronic media, comprising: a device enabling viewing of digitally stored information, the device being configured to display at least portions of a categorization structure for substantially all of a website having a plurality of nested cascading category levels, each category level of the plurality of nested cascading category levels comprising a plurality of category titles of electronic media content stored on at least one storage device, each category title having a selectable link-token to the stored content for said each category title, said each category title also being coupled to a nested subcategory structure of said each category title, the nested subcategory structure of said each category title comprising link-tokens of category titles wherein said each category title and the category titles in the different plurality of category levels are able to be browsed independently of having to select and retrieve the stored content for any title from the at least one storage device, wherein the categorization structure enables a user viewing content of any category title in the categorization structure to retrieve content of any other category title in the categorization structure using a single retrieval command.
2. The system according to claim 1, wherein link-tokens of one or more category titles in a first category level of the plurality of nested cascading category levels are displayed for viewing on a display device in response to placing a cursor on a starting symbol representing a gateway to viewing the categorization structure displayed on the display device, without clicking.
3. The system according to claim 2, wherein the link-tokens of one or more category titles in the first category level are displayed on the display device underneath the starting symbol representing the gateway to viewing the categorization structure.
4. The system according to claim 2, wherein placing the cursor on one link-token of the link-tokens of the one or more category titles in the first category level causes the title corresponding to the one link-token to be changed in appearance and causes a second category level having a second plurality of titles to be displayed alongside the first category level, the plurality of titles in the second category level being sub-categories of the category title changed in appearance in the first category level.
5. The system according to claim 4, wherein the titles in the second category level are displayed in a second listing-area with the titles listed one under the other.
6. The system according to claim 4, wherein placing the cursor on one title of the category titles displayed in the second category level causes said one title of the category titles displayed in the second category level to be changed in appearance and causes a third category level having a third plurality of category titles to be displayed alongside the second category level, the plurality of titles in the third category level being sub-categories of the changed in appearance title displayed in the second category level.

7. The system according to claim 2, wherein the titles in the first category level are displayed in a first listing-area with the titles listed one under the other.
8. The system according to claim 2, wherein the categorization structure resides with the pages of media content but is not displayed on the display device with the media content until a browser places the cursor on the starting symbol.
9. The system according to claim 2, wherein the media content are the pages of a web site.
10. The system according to claim 9, wherein a browser can navigate and browse the different category titles in the different category levels of the categorization structure without having to download a web page from the storage device and without having to navigate back and forth between different web pages.
11. The system according to claim 9, wherein the categorization structure resides with the web pages but is not displayed on the display device with the web pages until a browser places the cursor on the starting symbol.
12. The system according to claim 1, wherein the system has a selectable number of category levels.
13. The system according to claim 1, wherein the system has a selectable number of category titles in each category level.
14. The system according to claim 1, wherein the system is implemented using software, and wherein the single retrieval command is a single click.
15. The system according to claim 1, wherein when the cursor is moved from a category level having a plurality of category titles which are sub-categories of a title in a higher category level, the category level with the plurality of sub-category titles, and all subsequent category levels cease to be displayed on the display device.
16. The system according to claim 1, wherein when the cursor is moved from a first category title in a first category level to a second category title in the first category level, a first plurality of sub-category titles of the first category title in a second, lower category level ceases to be displayed on the display device, and a second plurality of sub-category titles of the second category title on which the cursor now rests is displayed in a second category level on the display device.
17. The system according to claim 1, wherein a browser can browse the categorization structure independently of any media content displayed on the display device.
18. The system according to claim 1, wherein a browser can navigate and browse the different category titles in the different category levels of the categorization structure without having to select and retrieve a page of media content from the storage device and without having to navigate back and forth between different pages of media content.
19. The system according to claim 1, wherein a browser can navigate back and forth between a category title in a first category level and a category title in a second category level of the categorization structure.
20. The system according to claim 1, wherein a browser can move from a first or any category title in a particular level to any other title in the same level of the categorization structure.



21. A system of claim 1, wherein the interlinked content structure is hidden from view and a subcategory structure is not displayed until a cursor rolls over a respective category title.

22. A system for tracking the navigation and browsing of electronic media, and facilitating the changing of navigation and browsing path, the system comprising a computer configured to display to a user pages of content within an inter-linked content structure having a textual table format comprising at least three category levels, and to enable the user to retrieve with one single retrieval command any desired content page within the inter-linked content structure from a display of every other content page of the inter-linked content structure.

23. A system for navigating and browsing electronic media, comprising: a device for viewing of digitally stored information, the device being configured to display at least portions of a categorization tree structure having a plurality of cascading category lists, each list of the plurality of cascading category lists comprising a plurality of category titles to electronic media content stored on at least one storage device, each category title having a selectable link-token to the stored content file for said each category title, wherein the device is configured to display one or more link-tokens in the stored content file for said each category title in response to placement of a cursor on the selectable link-token of said category title without clicking on or invocation of the selectable link-token of said category title, whereby the system enables the category titles in the different plurality of category lists to be browsed independently of selecting and retrieving stored content files for any title from the at least one storage device, wherein the categorization tree structure enables a user viewing content of any category title in the categorization structure to retrieve content of any other category title in the categorization structure using a single retrieval command.

24. A system with one or more processors and memory that enables digitally stored information to be viewed on a display device, comprising: a website comprising a plurality of web pages; a hierarchical categorization structure including a plurality of levels of nested references for substantially all of the web pages in the website, a displayed categorization structure that is viewable in conjunction with the content of any web page in the categorization structure and that includes at least a subset of the categorization structure references, such that a user is able to retrieve content of any other web page in the categorization structure by selecting using a single selection gesture a respective reference in the displayed categorization structure; and a gateway symbol displayed on at least some of the plurality of web pages for accessing the displayed categorization structure.

25. The system of claim 24, wherein the categorization structure is embedded in substantially all of the web pages in the website.

26. The system of claim 24, wherein the categorization structure is linked to substantially all of the web pages in the website.

**Aramco Americas and sites of other international subsidiaries also infringe on this patents.**

**Aramco Trading Company and Aramco Energy Ventures do not use this patented invention but use the very powerful Auto-Scrolling/Auto-Change patent family. When Saudi Aramco lawfully license this patented invention for the entire SA conglomerate, all subsidiaries can lawfully use these superior breakthrough Internet utilization and user-interface technological inventions.**